

WHAT IS CLAIMED IS:

1. A system for testing an electronic device including a first clock having a first frequency, the system comprising:

5 a tester device including a housing, a clock input, and a second clock having a second frequency positioned in the housing, the tester device operable to electrically engage the first clock using the clock input and to determine that the electronic device meets a  
10 particular performance standard;

a phase comparator positioned in the housing and coupled to the second clock and the clock input, the phase comparator operable to determine a frequency difference between the first and the second frequencies;

15 a filter positioned in the housing and coupled to the phase comparator, the filter operable to generate a signal indicative of the frequency difference based on the determined frequency difference; and

an amplifier positioned in the housing and  
20 coupled to the filter, the amplifier operable to generate a voltage value indicative of the frequency difference based on the generated signal.

2. The system of Claim 1, wherein the tester device  
25 further comprises a clock output coupled to the amplifier, the clock output operable to electrically engage the first clock, and wherein the amplifier is operable to transmit the voltage value to the first clock.

3. The system of Claim 1, wherein the amplifier is operable to transmit the voltage value to the second clock, and wherein the second clock is a voltage controlled oscillator amplifier operable to receive the voltage value  
5 from the amplifier and adjust the second frequency to a new frequency that is substantially equal to the first frequency.

4. The system of Claim 1, wherein the amplifier is  
10 coupled to a volt meter operable to indicate any change to the voltage value from a previous voltage value.

5. A method for testing a device, comprising:  
testing an electronic device having a first  
operating frequency by a tester device having a second  
frequency;

5 during the testing, repeatedly determining any  
frequency difference between the first operating frequency  
and the second operating frequency; and

for each determination of the frequency  
difference, generating a voltage value indicative of the  
10 frequency difference and equalizing the first and the  
second operating frequencies using the voltage value.

6. The method of Claim 5, wherein the equalizing  
comprises adjusting the first operating frequency by the  
15 frequency difference indicated by the voltage value.

7. The method of Claim 5, wherein the equalizing  
comprises adjusting the second operating frequency by the  
frequency difference indicated by the voltage value.

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8. The method of Claim 5, and further comprising:  
determining that a level of change in the voltage  
value compared to a previously generated voltage value  
exceeds a predetermined level;

25 indicating that the electronic device does not  
meet a particular performance standard.

9. The method of Claim 5, wherein the electronic device is an integrated circuit, and the testing is conducted prior to an installation of the integrated circuit into a final product.

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10. The method of Claim 5, wherein determining any frequency difference comprises determining any frequency difference using a phase comparator permanently positioned in the electronic device.

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11. The method of Claim 5, wherein determining any frequency difference comprises determining any frequency difference using a phase comparator permanently positioned in the tester device.

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12. The method of Claim 5, wherein testing comprises performing a diagnostic procedure prior to an installation of the electronic device in a final product.

13. A method for testing a device, comprising:  
testing an electronic device having a first  
operating frequency by a tester device having a second  
operating frequency;

5 during the test, determining a frequency  
difference between the first operating frequency and the  
second operating frequency; and

initiating an equalization of the first and the  
second operating frequencies using a signal indicative of  
10 the frequency difference.

14. The method of Claim 13, and further comprising  
generating a voltage value indicative of the frequency  
difference, wherein the voltage value is used as the  
15 signal.

15. The method of Claim 13, wherein the acts of  
determining a frequency difference and initiating an  
equalization are performed using the tester device.

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16. The method of Claim 13, wherein initiating the  
equalization comprises adjusting the first operating  
frequency by the frequency difference indicated by the  
signal.

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17. The method of Claim 13, wherein initiating the  
equalization comprises:

transmitting the signal to the electronic device;  
and

adjusting the second operating frequency by the frequency difference indicated by the signal.

18. The method of Claim 13, wherein the signal is a  
5 voltage value, and further comprising:

determining that a level of change in the voltage value compared to a previously generated voltage value exceeds a predetermined level; and

10 indicating that the electronic device does not meet a predetermined performance standard.

19. The method of Claim 13, wherein determining the frequency difference is performed using a phase comparator permanently coupled to the tester device.

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20. The method of Claim 13, wherein determining the frequency difference is performed using a phase lock loop circuit positioned in the tester device.